



18 Brief  
PTD  
7-23-03

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellant: Robert A. Foster  
Assignee: Financial Systems Technology Pty. Ltd.  
Title: Data Processing System For Pricing, Costing, and Billing of Financial Transactions  
Serial No.: 09/535,573 Filing Date: March 27, 2000  
Examiner: Cuong H. Nguyen Group Art Unit: 2165/  
Docket No.: M-4540-1C US

San Jose, California  
July 10, 2003

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APPEAL BRIEF UNDER 37 CFR § 1.191

Dear Sir:

Appellant submits this Appeal Brief in support of the Notice of Appeal filed in this case on April 18, 2003. An accompanying petition requests a 1-month extension of time, extending the time allowed for filing this appeal brief to July 18, 2003. The Commissioner is hereby authorized to deduct the amount \$320.00 being the amount specified in 37 C.F.R. 1.17(c) for this Appeal Brief as set forth in the accompanying transmittal. The Commissioner is also authorized to deduct any other amounts required for this appeal brief and to credit any amounts overpaid as set forth in the accompanying transmittal. This paper is submitted in triplicate.

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**I. REAL PARTY IN INTEREST**

The real party in interest is Assignee Financial Systems Technology Pty. Ltd.

**II. RELATED APPEALS AND INTERFERENCES**

There are no appeals or interferences known to Appellant, Appellant's legal representative, or the Assignee which will directly affect or be directly affected by or have a bearing on the decision by the Board of Patent Appeals in the pending appeal.

**III. STATUS OF CLAIMS**

Claims 47-86 are pending, rejected and appealed.

**IV. STATUS OF AMENDMENTS**

The Examiner issued a Final Office Action on November 6, 2002. In response, Appellant filed a Response to Final Office Action on February 6, 2003. Subsequently, the Examiner issued an Advisory Action on March 17, 2003, stating that the proposed amendments in Appellant's Response to Final Office Action will be entered upon filing of a Notice of Appeal and the present Appeal Brief.

**V. SUMMARY OF THE INVENTION**

The present invention relates to an apparatus and a method for use in the financial services industry which provide a data processing system, including a database, suitable for pricing transactions. According to one embodiment, such as described in Applicant's Specification, beginning at page 7, line 21 to page 14, line 32, the method includes (a)

creating a transaction instance corresponding to a transaction; (b) creating a first production service instance, linked by a first relation instance, representing an action performed to process the transaction; and (c) creating a billing service instance linked to the first production service instance by a second relation instance, representing a billing service related to a pricing of said first production service. In one embodiment, the method further includes creating a second production service instance linked to the transaction instance by the first relation instance (see, for example, Appellant's Specification, at page 9, lines 2-11). Multiple billing service instances can be linked to the production service instances by relation instances (see, for example, Appellant's Specification, beginning at page 12, line 9 to page 13, line 17).

The method of the present invention allows effective transaction analysis. For example, the method allows creating relation instances linking a transaction instance to an account instance, a client instance, an entity instance, or a market segment instance (See, for example, Appellant's Specification, at page 16, lines 3-14).

In a method of the present invention, transaction instances, production service instances and billing service instances can be stored in one or more entity instance tables (See, for example, Appellant's Specification, at page 10, lines 8-13). The relation instances can be stored in one or more relation instance tables (See, for example, Appellant's Specification, at page 10, lines 13-15).

The method of the present invention can be enhanced to include linking of a settlement service instance to a billing service instance by a relation instance (See, for example, Appellant's Specification, beginning at page 21, line 30 to page 23, line 10). Price tables instances, including cost and fee tables, can also be created and linked to transaction

instances and billing instances (See, for example, Appellant's Specification, beginning at page 23, line 11 to page 24, line 24).

The apparatus of the present invention is provided to carry out the methods of the present invention.

**VI. ISSUES**

Whether or not the Examiner erred by rejecting Claims 47-86 under 35 U.S.C. § 103(a) over U.S. Patent 5,630,127 ("Moore"), in view of U.S. Patent 5,559,313 ("Claus"), further in view of U.S. Patent 5,682,482 ("Burt"), and further in view of U.S. Patent 5,636,117 ("Rothstein").

**VII. GROUPING OF THE CLAIMS**

Claims 47-59, 63, 67-79, 83-84 and 86 stand and fall together.

Claims 60-62 and 80-82 stand and fall together.

Claims 64, 66, 85 and 55 are separately allowable.

**VIII. ARGUMENTS**

In the Final Office Action of November 6, 2002, the Examiner rejected Claims 47-86 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 5,630,127 ("Moore"), in view of U.S. Patent 5,559,313 ("Claus"), in view of U.S. Patent 5,682,482 ("Burt"), further in view of U.S. Patent 5,636,117 ("Rothstein"). The Examiner states, in section 14:

Moore et al. ('127) disclose that a rule-based application structure could be a relational database where records of a transaction are related to each other (see Moore, the abstract,

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Figs.3,4). Moore et al. obviously suggest that: service instances linking to transaction instances; creating a billing service instance linked to a service instance with relation instance (for claim 47), and an entity instance can be an account instance (for claims 64, 85 – for computer programming, please see also Duran et al. U.S. Pat. 5,694,598 wherein account instance is represented as a data list similar as an entity instance). Moore et al. ('127) obviously suggests a step of storing a transaction instance/an account instance/a client instance, a production service instance, a settlement service instance, and a billing service instance in an entity instance table, and they are inherently “link”/“related” together as a functional data structure (e.g., see '127 Fig. 4 and col. 10 lines 25-55) (for rejection of claims 48-51, 58, 69-75, 78, 83); (for OO programming using instances, please see also Duran et al. U.S. Pat. 5,694,598).

Burt et al. disclose a support method/system with related function including financial transaction function (e.g. see Burt et al. '482, the abstract), comprising steps:

- creating a transaction instance corresponding to a financial transaction (e.g. see '482, the abstract, col. 6 lines 1-14, and col. 21 lines 42-59)(for claims 47, 68)

Rothstein ('117) obviously suggests that a market segment instance can be an entity instance (for claim 55)(e.g. see '117 col. 2 lines 8-10, and lines 54-57, col. 3 lines 9-12, please see also Duran et al. (U.S. Pat. 5,694,698) for programming using instance); and

The examiner submits that a price table instance could be defined as a cost table instance (claim 60, 80), and said price could be a cost; or a price table instance could be defined as a fee table instance since price/fee table instance is just a sample instance data structure (for OO programming, please see also Gudmundson et al. (U.S. Pat. 5,680,619), Table V), and said price is a fee (claims 61, 81), whether they are expressed in different terms. The use of a relational database in cited prior art obviously suggest a step of creating a cost table instance related to a fee table instance by a relation instance (claims 62, 82 – for programming, please see also Gudmundson “Both Elements and Behaviors are “object containers” – in this embodiment, object instances that can “contain” (i.e., be linked to) other object instances. Elements can contain Modifiers, including other Behaviors”); and an entity instance can be an

account instance (e.g., see also Duran et al., U.S. Pat. 5,94,598 for a use of instance in OOP in a relational database, wherein different programming instances can be linked together).

Claus et al., further express analogous instances in a database (claims 64, 66, 85, and 55), since they are considered as objects in programming:

- an entity instance could be interpreted as a client instance (for OO programming, please see also Gudmundson et al. or Durand et al.);

- an entity instance could be interpreted as a market segment instance (for OO programming, please see also Gudmundson et al. or Durand et al.).

The examiner submits that all claimed limitations are known since events for pricing transactions are recognized as "links" to related objects in computer-related applications, cited prior art's limitations are not necessary spelled-out exactly claimed languages (please see also Duran et al.). It is reasonable that various modifications and variations of the described method and system of the cited prior art would be apparent to those skilled in the art without departing from the scope and spirit of the invention. Although cited prior art disclosures have been described in connection with specific preferred embodiments, it should be understood that their subject matter should not be unduly limited to such specific embodiments.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine specific applications of Moore et al., Burt et al., Rothstein, and Claus et al., in financial transaction with OO programming (in use a relational database) because they all suggest a systematic method to track all of the components of costs and fees each time a financial transaction is processed. It has been recognized that a financial system would be able to measure profitability in a flexible manner and to measure the impact of any changes from banking clients.

In addition, in section 20, the Examiner further states:

...Hence, there is nothing inventive in defining/creating different instances that linking together in a data structure (the

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definition is already established for an obvious use of “instance” in cited prior art).

(emphasis in the original)

In response to the Examiner’s rejection, Applicant filed a Response to Final Office Action on February 6, 2003. In this Response to Final Office Action, Appellant traversed the Examiner’s rejection. First, Appellant explained that the Examiner’s contention regarding what Moore “obviously suggest[s]” is unsupported. This is because the Examiner failed to show where in Moore’s disclosure is it disclosed or suggested the “service instances,” or “billing service instance.” In fact, Appellants submitted to the Examiner that Moore does not disclose “service instances” or “billing service instances.” Specifically, Appellant’s illustrated this failure to disclose “service instances” and “billing service instances” by referring to Moore’s specification, at col. 3, lines 40-59, where Moore merely discloses that its GRMS system is a risk management system that requires such data as foreign exchange rates, market prices and counter party ratings. Appellant explained that such information is qualitatively different from and provides no teachings relevant to the “production service instance” and the “billing service instance” recited in Claim 47, which are specific types of instances relating to pricing of a financial transaction:

creating, in the computer-readable medium, a  
transaction instance corresponding to a transaction;

creating, in the computer-readable medium, a first production service instance representing an action performed to process said transaction, said first production service instance being linked to said transaction instance by a first relation instance; and

creating, in the computer-readable medium, a billing service instance representing a billing service related to a pricing of said first production service, said billing service

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instance being linked to said first production service instance by a second relation instance.

Further, in the Response to Final Office Action of February 6, 2003, Appellant pointed out that the Examiner's reliance on Moore's Fig. 4 and col. 10, lines 25-55 to "obviously suggest[]" production service instance, a settlement service instance and a billing service instance in an entity instance table is also unsupported. Appellant pointed out that the portions of Moore that the Examiner relied for his rejection teach "option value," "option exposure" and other data structures relating to currency exchange transactions, and provides no teaching regarding any of a production service instance, a settlement instance and a billing service instance. Thus, Appellant demonstrated that the Examiner's reliance on Moore to teach specific portions of each of Claims 47-51, 58, 59-75, 78 and 83 is erroneous. Appellant also pointed out that the Examiner's reliance on U.S. Patent 5,695,598 ("Duran") is improper, as Duran was not a reference expressly included in the Examiner's combination of references the Examiner used to reject Claims 47-86 in the first paragraph of section 14. If the Examiner needs to rely on any teachings of Duran for his rejection, Duran should be included in the Examiner's combination of references stated in his statement of rejection.

In the Response to Final Office Action of February 6, 2003, Appellant also pointed out that the Examiner's reliance on Rothstein's col. 2, lines 8-10, lines 54-57 and col. 3, lines 9-12 to teach "market segment instance" is also misplaced. Appellant explained that, as clearly set forth in Rothstein, at col. 2, lines 1-3, Rothstein "provides a technique for monitoring the strength and trends of a real estate market, whether nationally or locally." Thus, Rothstein's disclosure has no bearing on the "market segment instance" of Claim 55, which relates to "a method for providing a database suitable for pricing transactions."



With respect to Claims 60-62 and 80-82, Appellant pointed out that the Examiner simply stated without support that a price table instance could be defined as a cost table instance or a fee table instance. His reliance of U.S. Patent 5,680,619 ("Gudmundson") or Duran is improper, as neither reference is cited by the Examiner in the first paragraph of section 14 as a reference over which any of Claims 47-86 is rejected. If the Examiner needs to rely on any teachings of Duran or Gudmundson for his rejection, that reference should be included in the Examiner's combination of references stated in his statement of rejection. In any rate, Gudmundson and Duran each merely teach use of a relational database and provides no teaching relative to price table instances, fee table instances or cost table instances.

With respect to Claims 64, 66, 85 and 55, Appellant pointed out that the Examiner's reliance on Claus to teach either "client instance" or "market segment instance" is also unsupported. Claus relates to "a smart card that is responsive to a list of items with individual prices that are received from a point of sale (POS) terminal during the individual transaction to automatically insert these items into expense categories." Thus, Claus too provides no teachings relevant to a database for pricing transaction, which is the subject matter of each of Claims 47-86. The Examiner's references to Gudmundson and Duran as they pertain to Claus are also improper for the reasons already stated.

Thus, as is demonstrated in Appellant's arguments in the Response to Final Office Action of February 6, 2003, to reject Claims 47-86, the Examiner cobbled together a large number of references, each pertaining to a different subject matter, with each reference having no relevant teaching with respect to each other or with respect to the subject matters of Claims 47-86 (i.e., database for pricing transactions). No coherent teaching can be synthesized from

this collection of references, taken as a whole. The Examiner's cited motivation that "they all suggest a systematic method to track all the components of costs and fees each time a financial transaction is processed" is not found in any of the cited references. Thus, there is no motivation or suggestion in these references to combine their teachings in the manner suggested by the Examiner. In fact, the subject matters cannot be so combined simply because they do not teach the instances the Examiner contends that they teach. Accordingly, Appellant submitted to the Examiner that Claims 47-86 are each allowable over the references of record, whether considered individually or in combination.

In the Advisory Action of March 17, 2003, the Examiner summarily dismissed Appellant's arguments set forth in Appellant's Response to Final Office Action of February 6, 2003, without addressing the substance of Appellant's arguments. The Examiner merely states in paragraph 11 of that Advisory Action that "Independent claims 47 & 68 are broad." Appellant respectfully disagrees with the Examiner. U.S. Patent laws do not provide any basis to reject claims merely because they are broad. The Examiner's comment fails to satisfy MPEP § 707.07(f), which requires the Examiner to take note of the applicant's argument and answer the substance of it.

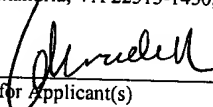
Accordingly, Applicant urges the Board of Patent Appeals and Interferences to reverse the Examiner's rejection of Claims 47-86 under 35 U.S.C. § 103(a).

#### **IX. CONCLUSION**

For the foregoing reasons, Appellant respectfully submits that Claims 47-86 are allowable the prior art of record. The Board of Patent Appeals and Interferences should

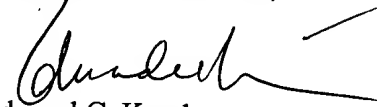
therefore reverse the Examiner's rejections under 35 U.S.C. § 103(a) of these claims under 35 U.S.C. § 103(a) over Moore, in view of Burt, and further in view of Rothstein.

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on July 10, 2003.

  
Attorney for Applicant(s)

7/10/2003  
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Respectfully submitted,

  
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## APPENDIX

Pending Claims 47-86 recite:

47. In a computer-readable medium, a method for providing a database suitable for pricing transactions, the method comprising:

creating, in the computer-readable medium, a transaction instance corresponding to a transaction;

creating, in the computer-readable medium, a first production service instance representing an action performed to process said transaction, said first production service instance being linked to said transaction instance by a first relation instance; and

creating, in the computer-readable medium, a billing service instance representing a billing service related to a pricing of said first production service, said billing service instance being linked to said first production service instance by a second relation instance.

48. The method of claim 47, further comprising creating, in the computer-readable medium, a second production service instance linked to said transaction instance by said first relation instance.

49. The method of claim 47, further comprising creating, in the computer-readable medium, a second billing service instance linked to said first production service instance by said second relation instance.

50. The method of claim 47, further comprising creating, in the computer-readable medium, a second production service instance linked to said transaction instance by a third relation instance.

51. The method of claim 47, further comprising creating, in the computer-readable medium, a second billing service instance linked to said first production service instance by a third relation instance.

52. The method of claim 47, further comprising, in the computer-readable medium, creating a third relation instance linking said transaction instance to an account instance.

53. The method of claim 52, wherein said account instance is linked to a client instance by a fourth relation instance.

54. The method of claim 52, further comprising creating, in the computer-readable medium, a fourth relation instance linking said transaction instance to an entity instance.

55. The method of claim 54, wherein said entity instance is a market segment instance.

56. The method of claim 47, further comprising storing said transaction instance, said production service instance and said billing service instance in at least one entity instance table.

57. The method of claim 56, further comprising storing said first relation instance and said second relation instance in at least one relation instance table.

58. The method of claim 47, further comprising creating, in the computer-readable medium, a settlement service instance linked to said billing service instance by a third relation instance.

59. The method of claim 47, further comprising:

creating, in the computer-readable medium, a price table instance related to said transaction instance;

wherein said price table instance contains a price for said billing service instance.

60. The method of claim 59, wherein said price table instance is a cost table instance and said price is a cost.

61. The method of claim 59, wherein said price table instance is a fee table instance and said price is a fee.

62. The method of claim 61 further comprising creating a cost table instance related to said fee table instance by a mandatory relation instance.

63. The method of claim 47, further comprising:

creating, in the computer-readable medium, an entity instance related to said transaction instance; and creating a price table instance related to said entity instance;

wherein said price table instance contains & price for said billing service instance.

64. The method of claim 63, wherein said entity instance is an account instance.

65. The method of claim 47, further comprising:

creating, in the computer-readable medium, a first entity instance related to said transaction instance;

creating, in the computer-readable medium, a second entity instance related to said first entity instance; and creating a first price table instance related to said second entity instance;

wherein said first price table instance contains a price for said billing service instance.

66. The method of claim 65, wherein said first entity instance is an account instance and said second entity instance is a client instance.

67. The method of claim 65, further comprising creating, in the computer-readable medium, a second price table instance related to first entity instance.

68. A database data processing system for pricing transactions, said data processing system comprising:

means for creating a transaction instance corresponding to a transaction;

means for creating a first production service instance representing an action performed to process said transaction, said first production service instance being linked to said transaction instance by a first relation instance; and

means for creating a billing service instance representing a billing service related to a pricing of said first production service, said billing service instance being linked to said first production service instance by a second relation instance.

69. The data processing system of Claim 68, further comprising means for creating a second production service instance linked to said transaction instance by said first relation instance.

70. The data processing system of claim 68, further comprising means for creating a second billing service instance linked to said first production service instance by said second relation instance.

71. The data processing system of claim 68, further comprising means for creating a second production service instance linked to said transaction instance by a third relation instance.

72. The data processing system of claim 68, further comprising means for creating a second billing service instance linked to said first production service instance by a third relation instance.

73. The data processing system of claim 68, further comprising means for creating a third relation instance linking said transaction instance to an account instance.

74. The data processing system of claim 73, wherein said account instance is linked to a client instance by a fourth relation instance.



75. The data processing system of claim 68, further comprising means for creating a fourth relation instance linking said transaction instance to an entity instance.

76. The data processing system of claim 68, further comprising at least one entity instance table to store said transaction instance, said production service instance and said billing service instance.

77. The data processing system of claim 76, further comprising at least one relation instance table to store said first relation instance and said second relation instance.

78. The data processing system of claim 68, further comprising means for creating a settlement service instance linked to said billing service instance by a third relation instance.

79. The data processing system of claim 68, further comprising:

means for creating a price table instance related to said transaction instance;

wherein said price table instance contains a price for said billing service instance.

80. The data processing system of claim 79, wherein said price table instance is a cost table instance and said price is a cost.

81. The data processing system of claim 79, wherein said price table instance is a fee table instance and said price is a fee.

82. The data processing system of claim 81 further comprising means for creating a cost table instance related to said fee table instance by a mandatory relation instance.

83. The data processing system of claim 68, further comprising:

means for creating an entity instance related to said transaction instance; and  
means for creating a price table instance related to said entity instance;

wherein said price table instance contains a price for said billing service instance.

84. The data processing system of claim 68, further comprising:

means for creating a first entity instance related to said transaction instance;

means for creating a second entity instance related to said first entity instance;

and means for creating a first price table instance related to said second entity instance;

wherein said first price table instance contains a price for said billing service instance.

85. The data processing system of claim 84, wherein said first entity instance is an account instance and said second entity instance is a client instance.

86. The data processing system of claim 84, further comprising means for creating a second price table instance related to first entity instance.